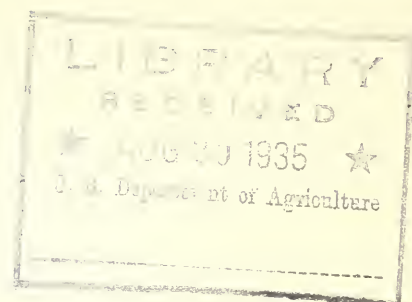


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FARM
COOPERATOR

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SEMPER
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SOIL EROSION SERVICE
U.S. DEPARTMENT of the INTERIOR
PROJECT No. 13
SPENCER

AIMS AND IDEALS OF THE SOIL EROSION SERVICE

A progressive business firm takes regular inventory of stock and knows at all times just where it stands so far as worldly goods are concerned. The progressive farmer can and should take stock of his achievements, and this, the harvest season of the year, is well fitted for this check up since the success or failure of recent farm operations are still fresh in mind.

During the long evenings that are now at hand the farmer can well afford to give serious thought to the ideals and aims of the Soil Erosion Service.

The Department of the Interior under which the Soil Erosion Service operates is interested in all conservation programs in the United States. Some have the opinion that the primary purpose of the Soil Erosion Service is relief. In some instances this misunderstanding has caused a wrong attitude toward our work. The Soil Erosion Service is an agency of conservation and in no sense is this a relief program.

This program is of a three fold nature and consists of economic, educational and inspirational phases.

The economic phase is a practical demonstration of recognized good farming practices. This represents the physical program that is now in operation on 259 farms of the area and consists of the distribution of lime, seed, fertilizer, wire and planting stock to complete the obligations of the Soil Erosion program covered by the Cooperative Agreements now in force. This part of the program is economic in nature because the results obtained from the application of this seed and fertilizer are certain to have a profound effect on the production of the lands treated.

While considering the program that the Soil Erosion Service offers it might be well to ask a few questions regarding the relation of this program to your own farm.

How will the adoption of a crop rotation improve farming on your particular farm?

Will the rotation of pasture fields give proper protection to the stand of grass and at the same time give maximum grazing production?

What are the advantages of strip cropping? Will it be possible to either alternate strips of crops or by contour cultivation to reduce erosion losses on fields that have gentle slopes?

Will the use of lime, seed and fertilizer enable you to increase the yields from your cultivated fields?

Will the check dams that the Soil Erosion Service proposes to build really control the active erosion in gullied fields?

Will it be wisdom to seek the advice of the Soil Erosion staff on matters pertaining to the organization and farm management?

These and perhaps many similar questions are the type that the cooperator should consider carefully at the time he enters into the program of the Soil Erosion Service.

It is the aim of this service to develop a program that can be accepted by the farmers of the area because they feel that it offers a solution to their problems. We would like to have these farmers feel that they have had a part in developing this program so that when the work is finally completed it will represent the best solution possible for the conditions that exist.

Thus the physical or economic phase of the Soil Erosion Program is the first big work that this service has set out to accomplish and during the first four months of active field work has completed Cooperative Agreements for 259 farms, consisting of 42,300 acres.

The second phase of the program consists of the educational work with the farmers of the area and will be carried out by means of evening schools, community meetings and correspondence

with cooperating farmers. This work is less spectacular than that associated with the economic program but is just as essential. The educational program will attempt to study basic reasons for certain new agricultural practices with the aim of finding out new and improved methods of farming.

The third phase of the Soil Erosion program we have called inspirational. We feel that the farmers who work with the Soil Erosion Service will get a new vision of their position in the community. We believe that they will be able, by virtue of an improved economic status, to live a fuller, more complete life. We think that their work will mean more to them when they realize the importance of the business of farming. We would like to have every farmer feel that he holds a very important place in the development of the Soil Erosion program for his farm and that much of the success of the program depends upon the whole hearted cooperation which he can give to the representatives of the Soil Erosion staff.

Each cooperator will find enclosed a self-addressed envelope which needs no stamp for the convenience of any one who wishes to write to the central office. If you have any questions to ask or if you have any suggestions to offer regarding your own program or the program of your neighbor, please write them on a sheet of paper and mail it. Please feel free to stop at the central office at Spencer at any time you care to discuss any phase of the program in which you are particularly interested.

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THE CHOICE OF A NAME

In the first news letter, we offered a prize to the farmer suggesting the best name. Many names were suggested, and each one was carefully considered. It was only after considerable deliberation that the final choice was made.

In order to be impartial in making the choice, each name suggested was typed on a separate sheet of paper and submitted to the

to the executive staff for their choice. This prevented anyone from knowing who had submitted the name for which he was voting. After "Farm Cooperator" had been chosen, as the name for our publication, the editor consulted the original sheets to find who had won. The winning name had been sent in by L. B. Rader of Palestine.

The prize awarded was lime, seed and fertilizer for an additional acre of alfalfa.

We should like to express our appreciation to all who sent in names and tender our regrets that each one could not win. Several of the other names sent in would have been entirely appropriate and proper.

The letters sent in were quite complimentary, not only to the news letter itself, but also to the Soil Erosion Service. Many showed an intense and discerning appreciation of the work which is attempted by this service.

With this type of Cooperator, it is not strange that this project has succeeded in the large measure that it has. It is a pleasure to work with such Cooperators.

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PROJECT EXPANSIONS

Expansion of the Federal Erosion Control program has recently been reported from 3 of the original 25 soil erosion projects; namely, North Carolina, South Carolina and Wisconsin. In each instance the extension was brought about thru the efforts of those in the new areas.

Some communities adjoining project 13 have shown interest in securing an extension which will include their community. At this time it appears entirely possible that this territory may be enlarged if enough interest is shown by the people living in adjacent communities.

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"Most of us fail to realize the complete desolation that one large fire can create. It takes years to rebuild the havoc of a few hours blaze."--H. Jenson.

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STATUS
OF
COOPERATIVE AGREEMENTS

The Soil Erosion Service is proud of its record of accomplishments so far. At the present time, Agreements have been made with 258 farmers, covering a total acreage of 42,300 acres.

There is just one regret and that is that we have not been able to reach a larger number of the farmers. Members of the Soil Erosion staff have worked night and day, so to speak, in order that they might reach as great a number of farmers as possible before seeding time this fall. However, we have, at the present time, 448 invitation cards from farmers who have not as yet been contacted. These farms cover a total acreage of 54,383 acres.

The number of Cooperative Agreements signed is excellent proof of the fine cooperative spirit that has been extended to the Soil Erosion Service by the farmers throughout the area. We have nothing to offer but praise for the way in which the cooperators have gone about their work. They have made every effort to see that materials furnished by the Service have been used in the way and in the manner designated in the Cooperative Agreement.

It is our hope to be able to reach, during the coming month, the 448 other farmers who have sent in an invitation card. Every day, we have farmers coming in the office, asking that we get to their farm as soon as possible. We are glad to have these visits and will try to make arrangements to go over your farm at times convenient for you.

JACKSON COUNTY
WANTS
SOIL EROSION SERVICE

Some time ago a representative from Jackson County called at the Soil Erosion Service office and requested that a representative of the Soil Erosion Service meet with citizens of Gay community and tell them of our program. This was arranged and the meeting was called.

Over 400 interested persons were present at the meeting. Our Regional Director, Dr. Hoover, explained how we are trying to check erosion. Short talks were also made by Mr. McKeever, Mr. Hebb and Mr. Samples. The audience was not only very attentive, but highly enthusiastic about the program.

Those present voted unanimously to petition for an extension of the area into that community and expressed a desire to cooperate in any way possible.

Mr. Staats, the chairman of the meeting, reports that a petition has been circulated and that 457 farmers have signed it. He further states that every farmer to whom the petition has been presented, has signed it. Not one has refused. Mr. Staats plans to have the petition presented to every farmer in the watershed in which the community is located.

These farmers are awake to the serious damage resulting from erosion on their farms and some of them are already taking such steps as they are informed will reduce their loss from this source. Their interest and initiative are commendable.

"A quitter never wins
and
a winner never quits."

FOREST FESTIVAL

Six years ago a small group of public spirited citizens met at Elkins and laid the foundation for the Mountain State Forest Festival. The Festival is a three day pageant dedicated to conservation activities and the development of West Virginia. Its growth has been phenomenal and year after year many thousands come to see the coronation of Queen Sylvia and to renew their faith in conservation.

October 4th of this year marked the coronation of Queen Sylvia V and also marked the entrance of the Soil Erosion Service as a conservation agency in the State of West Virginia and throughout the nation.

Project No. 13, with headquarters at Spencer, West Virginia, acted as a representative for the Soil Erosion Service with an exhibit demonstrating the value of different forms of vegetative cover in controlling runoff. The type of work being done to control erosion was illustrated by means of a series of mounted photographs. The local project entered a float, representing a typical eroded West Virginia farm.

There were approximately 80,000 people in attendance at the Festival this year and the greater part of them visited the Soil Erosion exhibit. They were eager to learn more about Soil Erosion and the work of the Soil Erosion Service. The small pamphlets furnished by the Washington office were much in demand.

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WOODLOT A MONEY CROP

Fifteen acres of farm woodland in Medina County, Ohio, protected for 35 years, has produced an annual gross income of \$150 worth of saw logs, \$100 worth of maple sirup and 30 cords each year of fire wood. In addition, the owner, Ira Yoder, has occasion to go to his woods each year for posts, a few poles and sticks of lumber for repair

jobs to his buildings or farm implements and supplies of fuel wood. Last winter he also furnished cordwood to several neighbors. The woods, managed for continuous production, is in excellent shape and still has an abundant supply of saw logs and cord wood for future crops, F. W. Dean, extension forester reports to the Forest Service.

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FIRE PREVENTION WEEK

President Roosevelt, in a special Proclamation, proclaimed the week of October 7-13 as Fire Prevention Week. In an effort to carry out the President's wishes and suggestions and become familiar with the excessive damages caused by fire in this country each year, the Soil Erosion Service contacted the county superintendents of schools in Roane and Wirt counties, asked for their cooperation in bringing this to the attention of all school children in the two counties. We wish to acknowledge the splendid cooperation extended by the county superintendents and the teachers of Roane and Wirt counties. More than one hundred twenty-five copies of the President's Proclamation were distributed and special attention was given by the teachers in conducting special class room work, acquainting the students with the damage done by fires and simple safety measures that could be practiced by all, resulting in fewer fires and a saving of millions of dollars to the nation.

Fire Prevention Week was also the topic of discussion at the weekly luncheon of the Rotary Club on Monday, October 15th, and met with enthusiastic response on the part of the Rotarians present.

The Boy Scouts have also been actively engaged in supporting Fire Prevention Week.

ALFALFA

Since the Soil Erosion Service has been instrumental in introducing alfalfa on practically every cooperator's farm, it is only natural that members of the staff are very much interested in following its growth.

Reports coming in from various parts of the area are very encouraging. There have been some three or four failures so far. These failures were probably caused from the exceedingly dry weather. However, most of the alfalfa is doing fine.

Mr. Simon N. Boggs, the first cooperator, can boast of a nice acre of alfalfa.

Mr. J. L. Holswade had a six weeks old alfalfa plant exhibited in the Soil Erosion Service exhibit at the State Forest Festival at Elkins, 4th, 5th and 6th of October.

Mr. Charles L. Smith, who is a strong believer in preparing a good seed bed, is now well repaid for his efforts.

Mr. John Simmons, who is trying alfalfa for the first time, is well pleased with results so far. The latest reports give height 12 inches.

Mr. J. H. Lowe, who was one of the first cooperators, is making plans to plant additional alfalfa next year.

Mr. N. A. Whited reports an excellent stand of alfalfa that is growing rapidly.

Mr. Frank Trickett has some nice looking alfalfa. The latest report by the Agronomist is to the effect that it will make a 12 inch growth this fall.

Mr. O. J. Argabrite has a good stand of alfalfa which has made excellent growth. This alfalfa was sown on a hill field of over 20 percent slope. We have every reason to believe that it will be a success.

Mr. Fenton Betts, who lives in the Limestone region, has been reported to have a very good field of alfalfa.

Mr. J. B. Sargent has a nice acre of alfalfa. It was rather slow in starting, but is now coming along fine.

Mr. E. E. Romine, who planted three acres of alfalfa beside the one acre furnished by the SES, has a very nice alfalfa field. This field was planted on a fairly steep slope, but has made very good growth.

Mr. Dewey Depue has something rather different in the way of planting alfalfa. The Agronomist was able to work out with Mr. Depue a system of strip strip cropping. The alfalfa was planted in the first strip in a field adjoining the road. There are seven strips in all in this field. It is strongly urged that all cooperators, who are interested in the benefit of strip cropping, visit this field on Mr. Depue's farm. The way in which the sod spaces left between the plowed strips was able to check erosion is very strongly demonstrated.

We should like to mention more cooperators in this report because we feel that there are others who have alfalfa doing just as well as the farmers mentioned, but space prohibits in this issue.

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Experiments show that a 7-inch layer of surface soil on an 8% slope will be completely washed away within our lifetime, if it is cropped to corn or allowed to remain fallow. A 3-year crop rotation will keep this surface soil in place for approximately 150 years, and alfalfa will check erosion for 5,000 years.

SOIL EROSION SURVEYS

The Soils Department of the Soil Erosion Service, Reedy Creek Project, has recently completed a reconnaissance soil erosion survey covering 43 of the counties of West Virginia, and is now engaged in a detailed soil erosion survey of the farms within the project area from which invitation cards have been received. When the survey of a farm is complete the information is taken by the agronomist who will visit the farm and talk with the farmer about his problems. Different kinds of soils have different problems of erosion and fertility.

One purpose of this article is to describe briefly the more important kinds of soils found in this area so that the cooperator may be able to recognize them as they occur on his own farm. Differences in agricultural or cropping value are brought out in the description.

Soils are given "series" names. Usually the name given is that of a town or county near where the kind of soil was first found. Within the series occur the various "types" of soils, as clay loam, sandy loam, etc. In the soil name the series name appears first, followed by the type name, as "Meigs Clay loam."

The most wide-spread soil occurring in this area is the Meigs clay loam. It is derived from the breaking down, through many years, of sandstones, and gray and red soft shales where they occur in thin layers, or where the soil materials derived from them have been thrown together by washing and slipping down the hillsides. Meigs clay loam has a brownish-yellow surface soil underlain by yellowish clay loam grading into red or

red and yellow mottled clay to a depth of three feet. Meigs stony loam is similar to the clay loam except that it contains quantities of sandstone fragments large enough to interfere seriously with cultivation.

Upshur clay is the "red clay" so commonly seen on the tops of hills and in bands along the hillsides. It is derived entirely from the red, soft shale seen in road cuts. The shale, and consequently the soil formed from it, contains some lime; lespedeza, clover, and blue grass are usually found on it wherever it occurs in pastures.

The Dekalb silt loam is the "chestnut soil," occurring on the peaks of ridges and sometimes on sidehills or at the bases of the steeper slopes where the soil material is derived from the weathering of the thick sandstone and sandy shales. The Dekalb silt loam is a grade coarser than clay loam and is easier to work, although it is heavy enough to form lumps when it dries out. The surface soil is yellowish-gray in color, and the subsoil is distinctly yellowish, but in the lower depths of the three foot section is mottled with gray spots.

The Dekalb sandy loam is similar in all respects to the silt loam just described, except that it is very light and sandy, and has no gray mottles in the deep subsoil.

The Dekalb stony loam and stony sandy loam are variations of the silt loam and sandy loam, but in all cases contain a large quantity of sandstone fragments large enough to interfere with cultivation.

The Brooke clay loam occurs in only a few small areas. It is a heavy clay loam with a dark-gray surface and ashy-gray subsoil. This

soil is derived from rock formations in which there is a large proportion of limestone. It is a fertile soil largely on account of the presence of lime in it.

The "bottom soils" fall mainly into two series, the Huntington and the Moshannon. These are periodical-ly overflowed by the streams along which they are found. Usually a new deposit of soil material washed from the hillsides farther up the valley is left on the surface after each overflow. Occasionally if the water is very high and the stream swift, it may eat into the banks on the curves, or cut new channels, doing considerable damage to the fields.

Huntington silt loam is a brown soil about 12 inches deep which grades into a lighter brown, more compact, silt loam or clay loam down to a depth of three feet. "Pockets" of sandy material, deposited in small, low areas when the streams were swift, occur in the subsoil throughout the type and particularly near the water's edge. The soil is heavy enough to crack in dry weather and becomes lumpy when plowed if allowed to dry out before it is harrowed. In lower places this soil is poorly drained as evidenced by gray mottles in the subsoil below depth of two feet.

Huntington fine sandy loam is much lighter in texture than the silt loam throughout the three foot section. The soil has a distinctly gritty feel when rubbed in the fingers. It is like the silt loam in all particulars except that the soil particles composing it are much coarser, and the type usually has better drainage.

Both the Huntington silt loam and fine sandy loam are derived from the wash from the Meigs soils where they occur in the upland farther up the valleys.

The Moshannon silt loam has a reddish-brown or dark Indian red surface soil of exactly the same texture as the Huntington silt loam. The only feature to distinguish the surface soil from the subsoil is the lighter red color of the latter. This type of soil is derived mainly from the wash from the Upshur clay, or "red clay" where it occurs farther up stream. The Moshannon silt loam is more fertile than the Huntington, mainly because it contains some lime washed out of the red shale.

The Tyler silt loam surface soil is a grayish-brown mellow silt loam about 10 inches deep. The subsoil, as seen in road cuts, is a grayish-yellow slightly compact silt loam, which under 30 inches, is stained with spots of iron rust, and mottled with gray. The Tyler soils occur in "terraces" or second bottoms along the same streams where Huntington and Moshannon soils are found. Many years ago, before the streams cut down their beds, the Tyler soils were overflowed just as the Huntington and Moshannon now are overflowed. An example of this is found in the grounds of the hospital for the insane at Spencer. These terraces may occur at an elevation of 20 to 100 feet above the present level of the streams.

All soil separations are based largely on differences in agricultural, or crop producing, value, location, method of formation, color, and texture or size of soil particles.

The Soil Erosion Survey includes study of the soil type, the cover crop, the steepness of slopes, and the amount of erosion that has taken place.

All soils except those occurring in the stream bottoms are subject more or less to severe erosion. The soils of this area are subject to erosive destruction in about the following order: Upshur, Meigs, Brooke, Dekalb, Tyler, Moshannon, and Huntington. It will be noted that those soils of heaviest texture, as the clays, are most subject to erosive action of heavy rains.

